

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

INTELLECTUAL VENTURES II LLC,

Plaintiff

-against-

JPMORGAN CHASE & CO., *et al.*,

Defendants

ECF CASE

13 Civ. 3777 (AKH)

ORAL ARGUMENT REQUESTED

**DEFENDANTS' MOTION FOR SUMMARY JUDGMENT OF INVALIDITY FOR
LACK OF PATENTABLE SUBJECT MATTER UNDER 35 U.S.C. § 101 AS TO U.S.
PATENT NOS. 6,826,694, 6,314,409 AND 6,715,084**

Redacted

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I. INTRODUCTION

Patent law protects only concrete and tangible inventions. It does not protect abstract ideas, even when a patent’s claims are directed to the use of those ideas in a computer system or with other conventional technologies. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2358 (2014) (“*Alice*”).

The asserted claims of the patents challenged in this motion—U.S. Patent Nos. 6,826,694 (the “’694”), 6,314,409 (the “’409”), and 6,715,084 (the “’084”)—are not patent eligible because they are directed to abstract ideas and functions to be implemented on conventional computers. Under both Supreme Court and Federal Circuit precedent, the asserted claims fall outside the scope of 35 U.S.C. § 101 and, as a result, are invalid as abstract.

On that basis, JPMC moves for summary judgment of invalidity under Fed. R. Civ. P. 56 as to claim 1 of the ’694 patent; claims 1–11, 13–21, 23–27, 29–30, 32–33, and 36–39 of the ’409 patent and claims 1–2, 4–7, 9, 12–14, 16–17, 19–20, 22–24, 26–28, and 30–32 of the ’084 patent.

II. ARGUMENT

A. Patentable Subject Matter Is a Threshold Legal Issue

“Whether a claim is drawn to patent-eligible subject matter under § 101 is a threshold inquiry” and “an issue of law.” *In re Bilski*, 545 F.3d 943, 950–51 (Fed. Cir. 2008), *aff’d*, *Bilski v. Kappos*, 130 S. Ct. 3218, 3225 (2010) (describing § 101 as “a threshold test”); *SiRF Tech., Inc. v. ITC*, 601 F.3d 1319, 1331 (Fed. Cir. 2010) (“Whether a [patent] claim is drawn to patent-eligible subject matter is an issue of law.”).

For this reason, the Supreme Court has held that the inquiry under § 101 “must precede the determination of whether [a] discovery is, in fact, new or obvious.” *Parker v. Flook*, 437 U.S. 584, 593 (1978) (“*Flook*”). In line with this principle, numerous courts have resolved

challenges under § 101 both at the pleading stage and on early summary judgment.¹ Here, the patent-eligibility issue is more than ripe because the Court has construed all of the potentially relevant terms. *See* D.I. 82 (Order Regarding Claim Construction and Patent Summaries). Because claim construction is complete, and because patent eligibility is a pure issue of law, the Court is well-positioned to decide the issue now, without waiting until the end of discovery.

B. A Patent May Not Claim an Abstract Idea Implemented on Conventional Computers

The Supreme Court has long held that abstract ideas are not patentable. In June of this year, however, a unanimous decision of the Supreme Court made it clear that applicants cannot patent a series of functions to be carried out by generic computer technology.

The Supreme Court began its analysis by setting forth a two-part framework for analyzing patent eligibility, namely (1) determining whether the claims “are directed to [a] patent-ineligible concept[,]” and (2) if they are, determining whether they contain “additional elements [that] ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355, *quoting Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–97 (2012) (“*Mayo*”).

In evaluating whether or not claims satisfy the second prong of this framework, the Court reaffirmed its prior holding that “[s]imply appending conventional steps, specified at a high level of generality” is not “*enough* to transform an abstract idea into a patent-eligible invention.” *Alice*, 134 S. Ct. at 2357, 2360 *quoting Mayo* (emphasis in original).² As a result, claims that recite abstract ideas implemented using conventional computer technologies are not patent eligible:

¹ *See* Section II.C, *infra*, for a partial list of cases.

² Here and throughout this brief, internal quotations, citations, and alterations are omitted for readability.

Stating an abstract idea while adding the words “apply it” is not enough for patent eligibility. Nor is limiting the use of an abstract idea to a particular technological environment. Stating an abstract idea while adding the words “apply it with a computer” simply combines those two steps, with the same deficient result. Thus, if a patent’s recitation of a computer amounts to a mere instruction to implement an abstract idea on a computer, that addition cannot impart patent eligibility.

Alice at 2358 (internal quotation marks and citations omitted). As a result, claims which “merely require generic computer implementation, fail to transform [an] abstract idea into a patent-eligible invention.” *Id.* at 2357.

Alice is not the only Supreme Court decision of controlling importance to this motion. In *Gottschalk v. Benson*, the Court earlier rejected “a method of programming a general-purpose digital computer to convert signals from binary-coded decimal form into pure binary form.” 409 U.S. 63, 65 (1972) (“*Benson*”). The Court observed that the computational steps there could be “carried out in existing computers long in use, no new machinery being necessary” and were not, therefore, patent eligible. *Id.* at 67. The Court reached this conclusion despite the fact that “[t]he mathematical formula involved” had “no substantial practical application except in connection with a digital computer.” *Id.* at 71–72. In other words, even algorithms which are *especially directed* to a computer environment are not patentable if they can be “carried out in existing computers long in use, no new machinery being necessary.”³ And in *Alice*, the Supreme Court

³ *Benson* also articulated an alternate test of patent eligibility which has come to be called the “machine-or-transformation test.” Under that test, the court asks whether the claims are directed to a specific machine or a transformation of matter. *Bilski*, 130 S. Ct. at 3225. Prior to *Alice*, the Supreme Court held that this test may be “a useful and important clue” to patent eligibility. *Id.* at 3227. But the Federal Circuit has since indicated that it is the Supreme Court’s more recent holding in *Alice* that provides the proper analytical framework. *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1354–55 (Fed. Cir. 2014) (“Given the new Supreme Court authority . . . there is no need to parse our own precedents here.”) For that reason, this brief applies the *Alice* framework. As the discussion below makes clear, however, the challenged claims *also* fail the machine-or-transformation test because they are directed to functions to be performed on generic computers rather than truly specific, novel devices.

cited this holding as an example of the fact that “[t]he introduction of a computer into the claims does not alter the analysis” of patent eligibility. *Alice* at 2357.

C. Since *Alice*, Courts Have Consistently Found Patents Claiming Functions Performed by Conventional Computers to Be Invalid Under § 101

In the short time since the Supreme Court decided *Alice*, three Federal Circuit panels and more than a dozen district courts have found that the implementation of a mathematical algorithm, function or data manipulation—no matter how novel the algorithm or idea—does not give rise to a patentable invention if the claims call for performing that process using conventional computer technology.

a. Federal Circuit Cases

In *Digitech Image Technologies v. Electronics for Imaging, Inc.*, 758 F.3d 1344 (Fed. Cir. 2014), the Federal Circuit held a patent relating to digital image processing invalid under § 101. The court found that the patent “claims an abstract idea because it describes a process of organizing information through mathematical correlations and is not tied to a specific structure or machine.” *Id.* at 1350. The court held that “[w]ithout additional limitations, a process that employs mathematical algorithms to manipulate existing information to generate additional information is not patent eligible.” *Id.* at 1351. *Digitech* is relevant to this motion because it makes clear that the manipulation of data by a generic computer is not patentable under *Alice*. The claims challenged in this motion are of exactly that character—*i.e.*, they are directed to the manipulation of data by generic computer systems.

In *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350 (Fed. Cir. 2014), the Federal Circuit found that claims directed to creating a “transaction performance guaranty” using a computer network were invalid under § 101. *Id.* at 1354–55. The court found the claims invalid because “[t]he computer functionality is generic” and because “it likewise cannot be enough that the

transactions being guaranteed are themselves online transactions. At best, that narrowing is an attempt to limit the use of the abstract guarantee idea to a particular technological environment, which has long been held insufficient to save a claim in this context.” *Id.* at 1355. *buySAFE* is relevant to this motion because it makes clear that applying an abstract idea in an online or networked environment is not sufficient to confer patent eligibility. In so holding, the Federal Circuit gave effect to the *Alice/Mayo* rule that limiting claims “to a particular technological environment” is not sufficient to confer patent eligibility.

In *Planet Bingo LLC v. VKGS LLC*, --- F. App’x ---, No. 2013-1663, 2014 WL 4195188 (Fed. Cir. Aug. 26, 2014), the court held invalid a patent for a computerized system for managing bingo games. “Claim 7 of the ’646 patent, for example, recites the steps of selecting, storing, and retrieving two sets of numbers, assigning a player identifier and a control number, and then comparing a winning set of bingo numbers with a selected set of bingo numbers.” *Id.* at *2. The court held the claims invalid under § 101 because the steps could be performed mentally or “in existing computers long in use.” *Id.* This case shows that, as the Supreme Court recognized in both *Alice* and *Benson*, claims are not eligible for patenting if they are directed to functions to be performed by “existing computers long in use.” Again, this is true of the challenged claims.

b. District Court Cases

Although the decisions of other district courts are not binding on this Court, recent decisions show a remarkably consistent application of the Supreme Court’s holdings in *Alice* and *Benson*. In particular, they show that district courts will, as a threshold matter, invalidate claims directed to even a *novel* concept, function or algorithm if it is claimed so as to be implemented using conventional computer technology.

In *Every Penny Counts, Inc. v. Wells Fargo Bank, N.A.*, No. 8:11-cv-2826-T-23TBM, 2014 WL 4540319 (M.D. Fla. Sept. 11, 2014), for example, the plaintiff owned a patent claiming a method of conducting electronic financial transactions. The court held that the claims were invalid because the computer components they recited—“a ‘data store,’ an ‘information processor,’ and a ‘communicator’”—were parts of a “generic, unspecified computer,” and did not provide “a meaningful limitation beyond generally linking the use of the method to a particular technological environment.” *Id.* at *5. This holding is especially significant to the current motion because some of the claims of the ’409 patent recite similarly generic computer components. As shown in *Every Penny Counts*, the recitation of this kind of generic computer component does not result in patentability.

In *Loyalty Conversion Systems Corp. v. American Airlines, Inc.*, No. 2:13-cv-655, 2014 WL 4364848 (E.D. Tex. Sept. 3, 2014), Senior Judge Bryson of the Federal Circuit sat by designation in the Eastern District of Texas. The patent at issue claimed a method for operating a website that facilitated the exchange of one airline’s frequent flyer points for another’s. Judge Bryson held the claims invalid under § 101 because “they are largely functional in nature,” and because the computer’s role was “limited to the basic functions of a generic computer, including storing and displaying information, performing simple arithmetic calculations, and enabling a customer to make e-commerce purchases from a vendor.” *Id.* at *9. The claims at issue in this motion recite functions that are similar in their level of generality to those addressed in *Loyalty Conversion*.

In *Walker Digital, LLC v. Google, Inc.*, No. 11-318-LPS, 2014 WL 4365245 (D. Del. Sept. 3, 2014), the court invalidated patent claims which laid out “an interaction whereby two parties share a series of demands with a third party, where one of the demands of both parties is

that the parties' identities remain anonymous unless and until there is at least some overlap between the demands and requirements of the two parties." *Id.* at *4. Because the claims did not require anything more than a conventional computer to perform functions like "receiving," "storing," and "processing" data to determine whether it satisfies a particular "search criterion," the claims were held invalid under § 101. *Id.* at *7. *Walker Digital* is particularly relevant to the current motion because the claims challenged here are also directed to receiving, storing, and processing data to determine whether or not rules have been satisfied.

In *Eclipse IP LLC v. McKinley Equipment Corp.*, No. SACV 14-742-GW(AJWx), 2014 WL 4407592 (C.D. Cal. Sept. 4, 2014), the court considered a set of related patents directed to a computerized dispatch and location tracking system, holding all of the challenged claims invalid under § 101. The court particularly pointed out that "[o]f course, the computers used to implement the idea will have to be 'specially programmed' to carry out the instructions. But that is true of all computer-implemented inventions," and thus the fact that *unclaimed* programming was required did not render the claims patent eligible. *Id.* at *7. As this analysis shows, the fact that a patent's claims require *unclaimed* programming is not sufficient to confer patent eligibility. That is equally true of the patents challenged in this motion.

In *Comcast IP Holdings I, LLC v. Sprint Communications Co.*, No. 12-205-RGA, 2014 WL 3542055 (D. Del. July 16, 2014), the court held that a patent for a method of optimizing a telephony network was invalid. As the court explained, "generic references to a telephony network and an application are not sufficient to render the claim patentable." *Id.* at *5. Again, *Comcast* shows that claims are not rendered patent eligible merely because, just as the patents challenged here, they are intended to be implemented in a networked environment.

And in *McRo, Inc. v. Namco Bandai Games America, Inc.*, No. 12-10322-GW (FFMx), 2014 WL 4749601 (C.D. Cal. Sept. 22, 2014), the court invalidated claims directed to “automatic lip synchronization for computer-generated 3D animation . . . using a rules-based morph target approach.” *Id.* at *11. The court invalidated the claims despite the fact that, when viewed in isolation, “these claims do not seem directed to an abstract idea.” *Id.* at *8. But “for purposes of the 101 analysis,” the court stated, “it is not enough to view the claims in isolation. Instead, when determining whether a patent contains an adequate inventive concept, the Court **must factor out** conventional activity.” *Id.* at *9 (emphasis added). This requirement “tracks the law’s long-standing concern with patents that consist of old material with the addition of a new, but abstract idea . . . where a claim recites tangible steps, **but the only new part of the claim is an abstract idea**, that may constitute a claim to an abstract idea.” *Id.* (citing *Alice*) (emphasis added). The court found that “what the claim adds to the prior art is the use of rules, rather than artists, to set the morph weights and transitions between phonemes.” *Id.* at *11. Because the claims had “an abstract idea at the point of novelty” they were invalid under § 101. *Id.* The same is true of the patents at issue here: insofar as they are novel, the way in which they are novel is abstract.

Each of the asserted claims of the challenged patents is invalid under this consistent, recent, body of law: indeed, the very thing that makes them invalid is precisely what caused IV to sue on them in the first place. As the Court knows, this is only one of nine litigations in which IV has asserted these patents.⁴ In each case, IV has accused the various defendants of infringing

⁴ (1) *Intellectual Ventures II LLC v. Huntington Bancshares Inc., et al.*, No. 2:13-cv-785 (S.D. Ohio); (2) *Intellectual Ventures II LLC v. U.S. Bancorp, et al.*, No. 0:13-cv-2071 (D. Minn.); (3) *Intellectual Ventures II LLC v. SunTrust Banks, Inc., et al.*, No. 1:13-cv-2454 (N.D. Ga.); (4) *Intellectual Ventures II LLC v. Commerce Bancshares, Inc., et al.*, No. 2:13-cv-4160 (W.D. Mo.); (5) *Intellectual Ventures II LLC v. BBVA Compass Bancshares, Inc., et al.*, No. 2:13-cv-

as a result of their use of a wide variety of different systems supplied by a wide variety of vendors. *See* Declaration of Michael Feldman (“Feldman Decl.”) at Ex. A (infringement contentions). As IV’s infringement contentions show, the merit of these patents (from IV’s perspective) is that *because they are not tied to any specific computer system*, they can be asserted against many different systems without regard to the kind of hardware or software they use, who created them, or how those systems are put into practice in the real world.

Under the controlling law, it is that very fact that dooms the patents, because functionally claimed inventions implemented on generic and conventional computers are not patent eligible and are instead invalid under § 101.⁵

D. The ’694 Patent Is Patent Ineligible Under § 101 and Invalid as a Result

The ’694 patent is directed to a method for sorting packets. It contains only one claim:

1. A method for filtering a packet, including the steps of:
 - a. receiving packet having at least one header parameter and a payload;
 - b. selecting an access rule based upon the contents of the payload of the packet received in step a;
 - c. implementing the access rule for a packet, wherein the access rule is selected base upon a combination of the contents of the packet received in step a and the contents of at least one other packet.

1106 (N.D. Ala.); (6) *Intellectual Ventures II LLC v. JP Morgan Chase & Co., et al.*, No. 1:13-cv-3777 (S.D.N.Y.); (7) *Intellectual Ventures II LLC v. First Nat’l Bank of Omaha*, No. 8:13-cv-167 (D. Neb.); (8) *Intellectual Ventures I LLC, et al. v. Capital One Fin. Corp., et al.*, No. 8:14-cv-111 (D. Md.); and (9) *Intellectual Ventures I LLC, et al. v. PNC Fin. Servs. Grp., Inc.*, No. 2:14-cv-832 (W.D. Penn.).

⁵ This is not the first time that IV has run into this problem. In a different tranche of cases, IV sued a number of other banks for infringing several patents as a result of their use of a variety of vendor systems. Feldman Decl. Exs. B–G (other complaints). Those cases proceeded until one of the judges – Judge Trenga in the Eastern District of Virginia – ruled on a motion similar to this one and invalidated IV’s remaining asserted patents under § 101. *See Intellectual Ventures I LLC v. Capital One Fin. Corp.*, No. 1:13-CV-00740 AJT, 2014 WL 1513273 (E.D. Va. Apr. 16, 2014), *appeal pending*, Fed. Cir. Case No. 14-1506.

This claim does not even *mention* a computer, much less call for a specific machine or programing to carry out the claimed functions.

All of the steps of the claim could be performed by a person. For example, the step of [a] *receiving* packets would be performed by the Court if *it* were handed slips of paper with packets written on them. Similarly, the Court could perform step [b] and the second half of step [c] by *selecting* an access rule to apply based on the content of the payloads of the packets *it* had been handed. And the Court could *implement* the access rule as called for in the first half of step [c] by, for example, either handing the packets to the clerk (for entry into the record) or by throwing them away. The fact that the claim could be performed using mental steps supports the conclusion that this is an unpatentable abstract idea. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011) (“It is clear that unpatentable mental processes are the subject matter of claim 3. All of claim 3’s method steps can be performed in the human mind, or by a human using a pen and paper. Claim 3 does not limit its scope to any particular fraud detection algorithm . . .”). Indeed, like the claim at issue in *CyberSource*, the claim here does not call for any particular structure, programming code, or a specific algorithm. Instead, the claims seek to cover the *idea* of sorting “discrete units of information” using *any* of a broad category of (unspecified) rules. D.I. 82 at 11–12.

The ’694 patent claim is, therefore, both directed to an abstract idea (satisfying the first step of *Alice*), and lacking any “additional element” which could *transform* it into a patent-eligible invention (failing *Alice*’s second step). Indeed, even insofar as the claims are limited to a computer environment, they are not patent eligible because *Alice* is clear that “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *Alice* at 2358. What could be more generic than a computer that isn’t even

mentioned in the claim? To put it differently, the claim calls for the performance of a method. Because it does not mention a *specific* machine, the method would be infringed *regardless* of the kind of computer that performs the process. Thus, the method is directed to, at most, *generic* computing elements rather than to specific ones.

What's more, the patent is itself clear that the claimed method is intended to be used with *known* (*i.e.*, conventional) computers:

A ***known*** firewall is placed between the packet's source and intended destination, where it intercepts the packet. The ***known*** firewall filters a packet based upon the packet's header parameters and a rule loaded into the firewall. The rule correlates a pattern in the header of a packet with a prescribed action, either PASS or DROP. The filter identifies the rule that applies to the packet based upon the packet's header, and then implements the rule's prescribed action.

Feldman Decl. Ex. H ('694 patent) at 1:29–36 (emphasis added). According to the '694 patent specification, the invention improves upon this known technology because it “advantageously provides for filtering a packet based not only upon its header information, as in known firewalls, but upon the information contained in the packet payload.” *Id.* at 2:6–9. In other words, the alleged improvement lies in the *idea* of selecting the access rules based on the information in the payload—not in any particular machine or specific program for implementing that idea.

During prosecution it became clear that firewalls that looked at a packet's payload were already known in the art. *See* Feldman Decl. Ex. I at 2 (excerpt from '694 prosecution history). In response, the applicant narrowed its claims by adding the *idea* of selecting the access rule using multiple packets to the *idea* of selecting the rule based on a payload. *See* Feldman Decl. Ex. J (excerpt from '694 prosecution history). Thus the “inventive contribution” of the claim was said to be the taking of a *conventional* firewall which performs the *conventional* step of inspecting packet payloads and headers, and adding to it the *idea* of rules based on the contents

of more than one packet. The patentee didn't invent the firewall, or the processing step of looking at packet headers or payloads, or any specific code or programming for performing that function. Under the cases cited above, such a claim is not patent eligible and is invalid. *See Alice* at 2360 (“[T]he claims at issue amount to nothing significantly more than an instruction to apply the abstract idea . . . using some unspecified, generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention.”).

E. The '409 Patent Is Patent Ineligible Under § 101 and Invalid as a Result

The claims of the '409 patent are directed to the abstract idea of restricting access to data using a set of rules. Consider claim 1:

1. A method of distributing data, the method comprising:
 - [a] protecting portions of the data; and
 - [b] openly distributing the protected portions of the data, whereby
 - [c] each and every access to an unprotected form of the protected portions of the data is limited in accordance with rules defining access rights to the data as enforced by an access mechanism,
 - [d] so that unauthorized access to the protected portions of the data is not to the unprotected form of the protected portions of the data.

The claim is directed, on its face, to the idea of controlling access to openly distributed information.

To illustrate, take the climactic scene from the prior-art movie *Crimson Tide*.⁶ In that scene, Central Naval Command [a] encrypts a message and [b] openly distributes it over the airwaves. The encrypted message is received (among other places) on board the submarine where (executive officer) Denzel Washington and (captain) Gene Hackman are debating whether or not they should fire nuclear missiles at a group of Russian rebels. As the executive officer,

⁶ *Crimson Tide* was released in May 1995—nearly three and a half years before the application leading to the '409 patent. *See* <http://www.imdb.com/title/tt0112740/>; Fed. R. Evid. 201, 806, and 807.

Mr. Washington (acting as an access mechanism) [c] decrypts the message and provides Mr. Hackman with an unencrypted plain-text version in accordance with the military's rules. After the scene ends, the decrypted message is destroyed.⁷ As a result, [d] anyone else who might try to get access to the message (*i.e.*, without going through the procedures enforced by Mr. Washington) would only get access to the encrypted version. As this analogy shows, the claims are fundamentally directed to the abstract idea of openly distributing and then maintaining control over access to encrypted information.

The claims do not satisfy the second step of the *Alice* framework. The only thing the claim adds to the *Crimson Tide* version is the idea of replacing a Hollywood movie star with a computerized “access mechanism.” According to IV’s own *internal* analysis of the patent, [REDACTED] Feldman Decl. Ex. K (IV2JPMC0080142). Under the Court’s claim construction, however, the “access mechanism” is purely generic and not a specific machine. It is, instead, any “hardware and/or software for controlling access to data.” D.I. 82 at 8. Even the ’409 patent specification says that “[i]t is envisioned that a *standard computer*, equipped with an access mechanism 114 will function as an authoring/distribution system.” Feldman Decl. Ex. O (’409 patent) at 28:32–34 (emphasis added). Thus the “access mechanism” adds nothing beyond a directive to apply the claimed idea using a standard computer. That is plainly insufficient to satisfy the second step of *Alice*, because claims which “merely require generic computer implementation, fail to transform [an] abstract idea into a patent-eligible invention.” 134 S. Ct. at 2357.

⁷ This step is not shown in the movie, but is required by military regulations. *See, e.g.*, https://www.dhs.gov/xlibrary/assets/foia/mgmt_directive_11045_protection_of_classified_national_security_information_accountability_control_and_storage.pdf at § 6.G.3.

As a reference point, the computer system found inadequate in *Alice*, was a good deal more specific than the “access mechanism” recited in claim 1 of the ’409 patent. In *Alice*, the Court concluded that system claims requiring a “data processing system” with a “communications controller” and “data storage unit” did not offer “meaningful limitation[s] beyond generally linking the use of the method to a particular technological environment, that is, implementation via computers.” *Alice* at 2360 (internal quotation marks omitted). The Court noted that “[n]early every computer will include a ‘communications controller’ and ‘data storage unit’ capable of performing the basic calculation, storage, and transmission functions required by the method claims.” *Id.* Thus, the recitation of those components did no more than invoke the use of computers generally. Against this standard, the *unspecified* “hardware and/or software” found in claim 1 of the ’409 patent is clearly inadequate to create patent eligibility.

To put it differently, claiming the use of a generic computerized “access mechanism” to control access, use, and distribution of data directly implicates what the Supreme Court called “the pre-emption concern that undergirds our § 101 jurisprudence.” *Alice* at 2358; *Benson*, 409 U.S. at 67 (“abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work.”). IV is specifically *counting* on obtaining a broad, device-independent preemption to make the patent valuable. According to the documents produced thus far, IV believes the patent covers technologies as diverse as [REDACTED] (IV2JPMC0080143), [REDACTED] (IV2JPMC0080174), [REDACTED] (IV2JPMC0080242), [REDACTED] [REDACTED] (HTS000085), and [REDACTED] (same), not to mention the *dozens* of [REDACTED]

different products and technologies recited in IV's infringement contentions against JPMC and the other banking defendants. *See* Feldman Decl. Exs. K–N.⁸

Nor does the claim recite any *other* “additional element” which could *transform* it into a patent-eligible invention. Other than the “access mechanism” the claim recites nothing that could be structures at all, just a litany of conventional functions like “protecting,” “distributing” and limiting access to that data using (unspecified) rules.

That should be the end of the matter. The claim is directed to an abstract idea. The only computer technology it calls for is unspecified “hardware and/or software for controlling access to data.” All of the method's steps are things that *could be* performed by Denzel Washington, a secret decoder ring, and a paper shredder. That is not enough. As the Court put it in *Alice*, “[g]iven the ubiquity of computers . . . wholly generic computer implementation is not generally the sort of additional feature that provides any practical assurance that the process is more than a drafting effort designed to monopolize the abstract idea itself.” *Alice* at 2358 (internal quotation marks omitted).

Claim 1 is, therefore, invalid.

F. The Other Asserted Claims of the '409 Patent Are Invalid for the Same Reasons

None of the other claims asserted by IV change the § 101 analysis. The Supreme Court and the Federal Circuit have both been clear that minor variations in language and/or claiming additional conventional activity do not change the analysis. As the Supreme Court explained in *Alice*, claims which are the same “in substance” rise or fall together:

[T]he system claims are no different from the method claims in substance. The method claims recite the abstract idea implemented on a generic computer; the system claims recite a handful of

⁸ The accused devices include payment processing systems, firewalls, routers, network simulators, secure email, encryption cards, remote access systems, and internet certificates.

generic computer components configured to implement the same idea. This Court has long warned against interpreting § 101 in ways that make patent eligibility depend simply on the draftsman's art.

Alice at 2360 (internal quotation marks omitted). Similarly, the Federal Circuit has held that “system claims that closely track method claims and are grounded by the same meaningful limitations will generally rise and fall together.” *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1341 (Fed. Cir. 2013) (“*Accenture*”).

Indeed, for this reason, when the challenged claims “are substantially similar and linked to the same abstract idea, the Court is free to dispose of the additional claims in a less detailed fashion” and the defendant is not required to “to engage in an extended attack on each of the [] claims contained in the Patents-in-Suit.” *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, No. 12-2501 MAS TJB, 2013 WL 3964909, at *5 (D.N.J. July 31, 2013) (citing *Bilski*, 130 S. Ct. at 3230 (determining that eleven claims were invalid as abstract after analyzing two of the claims in detail)); *CyberFone Sys., LLC v. Cellco P’ship*, 885 F. Supp. 2d 710, 713 (D. Del. 2012), *aff’d sub nom. Cyberfone Sys., LLC v. CNN Interactive Grp.*, 558 F. App’x 988 (Fed. Cir. 2014) (invalidating all twenty-four claims after analyzing the first claim); *Glory Licensing LLC v. Toys “R” Us, Inc.*, No. 09-4252 (FSH), 2011 WL 1870591 (D.N.J. May 16, 2011) (dismissing three patents containing 121 claims after analyzing a single claim).

For the sake of completeness, JPMC has included a detailed breakdown of the other *thirty-two* claims of the ’409 patent that IV has asserted. But, under the Federal Circuit’s case law, the Court need not engage in an extended exegesis with respect to each of those claims. Under controlling law, all of the ’409’s claims are invalid under § 101 for the same reasons as Claim 1.

Claim 2

Claim 2 depends from claim 1 and further recites that “the protecting of portions of the data comprises encrypting the portions of the data, whereby unauthorized access to the protected data is not to the un-encrypted form of the protected data.” In other words, the act of *protecting* the data is done by *encrypting* the data. As a consequence, if someone gains unauthorized access to the data they only gain access to its encrypted form.

Nothing about this additional limitation transforms the claim to one that is patent eligible. To the contrary, *encryption* is itself an abstract mathematical technique (similar to the binary conversion process at issue in *Benson*) and was a well-known and conventional way to protect data in a computer environment at the time the application that issued as the ’409 patent was filed. Indeed, the ’409 patent notes in its Background section that the “principal technology which *has been used* for protecting intellectual property is cryptography.” ’409 patent at 3:30–31. Insofar as claim 2 purports to add the concept of using cryptography to protect data it is simply reciting the use of a well-known conventional technology, and only then at a high level of generality. It is not sufficient to satisfy the second step of the *Alice* framework. *See Walker*, 2014 WL 4365245 (holding that a claim that covered public-key cryptography was directed to an abstract idea and was therefore unpatentable).

Claim 3

Claim 3 depends from claim 2 and further calls for “encrypting the data encrypting key.” Claim 3 (like claim 2) recites the use of a well-known conventional technology recited at a high level of generality. Indeed, the ’409 patent concedes that the use of encryption keys was well-known at the time the application that issued as the ’409 patent was filed. ’409 patent at 3:38–44 (“The information to be protected is encrypted and transmitted to the authorized user(s).

Separately, a decryption key is provided The key is subsequently used to enable decryption of the information so that it is available to the authorized user(s).”) Again, this is not the kind of “additional feature” that can transform the claim to one that is patent eligible. *See Alice* at 2359 (rejecting claims where “the function performed by the computer at each step of the process is purely conventional.”); *Walker, supra* (claim to encryption technology not patentable).

Indeed, the step of encrypting the encryption key is not related to the *claimed* invention because none of the claims call for anything further to be done with the *encrypted* form of the key. From the perspective of the claimed solution, the act of encrypting the encryption keys is a mere post-solution activity that does not impact patent eligibility. *Flook*, 437 U.S. at 590 (“The notion that post-solution activity, no matter how conventional or obvious in itself, can transform an unpatentable principle into a patentable process exalts form over substance.”).

Claim 4

Claim 4 depends from claim 3 and further recites “providing a decrypting key corresponding to the key encrypting key.” This is a purely conventional step that adds nothing beyond the statement that the claims protect data using cryptography. Indeed, the ’409 patent acknowledges that in existing cryptographic systems “a decryption key is provided only to authorized users.” ’409 patent at 3:30–44. Reciting the use of a conventional decryption key as a counterpart to the encryption key does not transform the claim under *Alice*.

Claim 5

Claim 5 depends from claim 1 and further provides that “the data represent at least one of software, text, numbers, graphics, audio, and video.” This element does not add any meaningful “additional features” to the claim that would transform its patent eligibility. The enumerated types of information comprise virtually every conceivable type of data that one might distribute.

Rather than limiting independent claim 1—to *mitigate* preemption concerns—the broad scope of this claim merely compounds those concerns. *Alice* at 2358 (noting “the pre-emption concern that undergirds our § 101 jurisprudence”). This claim is not valid.

Claims 6 and 8

Claim 6 and 8 depend from claim 1 and add the idea of user-specific access rules. There is nothing about user-specific access rules that could transform claim 6 into a patent-eligible invention. Indeed, the idea of user-specific access rules is *itself* a common abstract idea used every time a person logs in to check e-mail, or withdraws money from an ATM. Adding one abstract idea to another does not change the character of the claim so as to save it from a challenge under § 101. Also, user-specific access rules predate the ’409 patent; indeed, the specification admits that identity-based access control existed in the prior art. ’409 patent at 4:30–37 (citing Abrams, “Generalized Framework for Access Control: Towards Prototyping the ORGCON Policy” as “a strong form of ***identity-based access control***”) (emphasis added). Thus, user-specific access rules are purely conventional and cannot transform the claim under the second step of *Alice*.

Claim 7

Claim 7 depends from Claim 1 and requires both (a) that “the rules indicate distribution rights of the data” and (b) “allowing distribution of the unprotected form of the protected data portions only in accordance with the distribution rights indicated in the rules.” In other words, claim 7 adds only that the access rules specify distribution rights for the data. The additional elements of claim 7 cannot transform the nature of the claim. Instead, claim 7 is *itself* directed to the abstract idea of distribution rules. The ’409 patent explicitly admits that the idea of rules governing secondary distribution of data was in the prior art. *See* ’409 patent at 4:3–9 (“ORCON

requires the permission of the originator to distribute information beyond the original receivers designated by the originator. The Propagated Access Control (PAC) policy and the related Propagated Access Control List (PACL) were proposed as one way of implementing ORCON.”) Because claim 7 recites only well-known and conventional concepts, it fails under the second step of *Alice*.

Claim 9

Claim 9 depends from claim 8 and recites certain kinds of “rights” that can be implemented by the access rules—such as “local display rights, printing rights, copying rights, execution rights, transmission rights, and modification rights.” Nothing about this transforms the claim into a patentable invention under *Alice*. To the contrary, a rule that embodies rights is *itself* an abstract idea. (Indeed, the Court’s rules for accessing sealed documents are access rules which contain copying rights.)

Claim 10

Claim 10 depends from claim 1 and adds the idea that the rules can specify a *quantity* of access that is permitted to the data. Like the other claims, claim 10 is directed to an abstract concept, *i.e.*, the idea of a rule that governs how often or how many times a user may access data. This is an abstract idea which is embodied in every single-use movie ticket or any 10-ride subway card.

Claim 11

Claim 11 depends from claim 10 and further specifies that “the access control quantities include at least one of: a number of allowed read-accesses to the data; an allowable size of a read-access to the data; an expiration date of the data; an intensity of accesses to the data; an allowed level of accuracy and fidelity; and an allowed resolution of access to the data.” In other

words, the claim recites some of the limits that can be incorporated into the rules described in claim 10. Nothing about claim 11, however, changes the nature of the claim. Instead, this claim recites additional abstract ideas that can be specified in rules. But the idea of using rules to specify *any* form of access to data is simply piling one abstract idea onto another. It is not “sufficient to transform the claimed abstract idea into a patent-eligible application.” *Alice* at 2357.

Claim 13

Claim 13 depends from claim 1 and also recites certain kinds of rules. These rules may “relate to at least one of: characteristics of users; characteristics of protected data; and environmental characteristics.” The type of rule does not change the base abstract idea of the claim or transform it into a patent-eligible invention under *Alice*.

Claims 14, 26, 37 & 39

Claims 14, 26, 37, and 39 add the idea that “the rules defining access rights include at least one internal rule built in to the access mechanism.” Requiring a rule to be “built in to the access mechanism” (which the Court has construed to mean “integrated into the access mechanism”⁹) cannot change the abstract nature of the claim; it merely specifies that the rules are (somehow) integrated with the (unspecified) “hardware or software” that makes up the access mechanism. In addition, the idea of loading rules into a computer is purely conventional and cannot transform the claim. Indeed, the intermediated settlement mechanism found invalid in *Alice* had at least one integrated rule—a fact which did not save it. *See Alice* at 2359 (system claims that “allow[ed] only those transactions for which the parties have sufficient resources” are unpatentable).

⁹ D.I. 82 at 7.

Claims 15 & 27

Claims 15 and 27 require that “at least one internal rule cannot be made less restrictive by any other rules.” These claims do not recite any specific device, implementation, code, software, hardware, or mechanism or specify which rule cannot be made less restrictive. Instead, they merely recite the *principle* that one rule cannot be “overruled” by another. This is a purely abstract idea which cannot transform the nature of the claim. As with other claims, they simply pile one abstract idea on top of another. They do not satisfy the second step in *Alice*.

Claims 16, 17 & 29

Claim 16 provides that “the access mechanism is contained in a stand-alone device.” This additional element cannot transform the base abstract idea because it does not *even* specify a generic computer, but instead calls for all “stand-alone” devices. Claiming the use of an abstract idea in connection with *all* stand-alone devices of whatever kind pre-empts the use of the abstract idea and cannot transform the claim into one that is patent eligible.

Claims 17 and 29 further require the device to be “selected from the group consisting of: a facsimile machine, a television, a VCR, a laser printer, a telephone, a laser disk player, ***and a computer system.***” Because the claims explicitly include (and are *broader than*) implementation on a generic computer, they fail under the second step of *Alice*. To put it differently, if claims are invalid as abstract even when limited to computer implementation, they must also be abstract when directed to a *broader* technological environment – as is the case with both of these claims.

Again, these claims all fail *Alice*’s second step.

Claims 18, 19 & 20

Claim 18 depends from claim 1 and is nothing more than an amalgamation of the other claims. The *combination* of elements—previously shown to be patent-ineligible—is not

sufficient to transform the claim or mitigate the risk of pre-emption of the base abstract idea. To the contrary, and as *Alice* observed, “[c]onsidered as an ordered combination, the computer components of petitioner’s method add nothing . . . that is not already present when the steps are considered separately.” *Alice* at 2359 (internal quotation marks omitted). The same is true here. Claim 18 adds nothing beyond concatenating the ideas of (a) a stand-alone device selected from the expansive group set forth in claim 17, (b) the built-in rules of claim 14, and (c) the access control rights of claim 8. All of these ideas are abstract when taken separately, and the combination adds nothing that renders the whole greater than the sum of the parts from a patent-eligibility perspective.

Claim 19 is similar in that it also depends from claim 1 and again is a mere amalgamation of other abstract ideas. In particular, it is an amalgamation of the limitations recited in claim 7 (distribution rules) and in claim 14 (built-in rules). It cannot transform the claim because, taken together, these limitations “add nothing . . . that is not already present when the steps are considered separately.” *Alice* at 2359.

Claim 20 depends in turn from claim 19 and adds to it the abstract ideas recited in claim 2 (encryption), claim 3 (using encryption keys) and claim 7 (distribution rules). Again, the conjoining of these abstract ideas does not transform the claim into something patentable because the whole is nothing more than the sum of its parts—namely, an amalgamation of abstract ideas to be implemented on (unspecified and generic) “hardware and/or software.”

Claim 21

Claim 21 is substantively similar to claim 1. Aside from a minor linguistic difference in the preamble, claim 21 calls for protecting and distributing the rules *in addition to* the data. This difference does not affect the analysis of the claim. Claim 21, like claim 1, is drawn to the same

abstract idea. Claim 1 *assumes* that the rules are delivered to the access mechanism while claim 21 expressly calls for the rules to be *sent to* the access mechanism. This is immaterial to the underlying abstract idea. The claim does not recite any “additional features” that could transform the claim into one that is patent eligible—just the same “access mechanism” called for in claim 1. Validity again fails under *Alice*’s second step.

Claim 23

Claim 23 is yet another independent claim that is “no different . . . in substance.” *Alice* at 2360. Indeed, the first three elements of claim 23 are virtually identical to the first three elements of claim 21. The last element adds the idea of “limiting transmission of the protected portions of the data from the device: (a) only as protected data or (b) in accordance with the rules.” This cannot make a difference to the § 101 analysis, however, because both (a) and (b) are abstract. In particular, whether taken together or separately, (a) and (b) define two aspects of the same idea—namely that to control access to a piece of data you *either* need to encrypt it, or protect it with rules that limit the distribution. If you do neither, then you have no control over either its use *or* distribution, and it can be copied and distributed at will. Thus the final limitation of claim 23 really does nothing beyond claim the *idea* of controlling data by exercising control over either its distribution or its format. Again, that is an abstract concept making use of *conventional* processing and does not render the claim patent eligible under *Alice*’s second step.

Claim 24

Claim 24 is an independent claim that repeats all elements of claim 21. There is only one difference: claim 21 recites a method for distributing data while claim 24 recites a method of “accessing openly distributed data.” The difference between distributing and accessing, without reciting any “additional features,” cannot transform claim 24 to a patent-eligible invention.

Indeed, because the claims are “no difference . . . in substance” they rise or fall together. *Alice* at 2360.

Claims 25, 30, 32, 33, 36 & 38

Claims 25, 30, 32, 33, 36, and 38 are independent claims that are all substantively similar. Indeed, there are only two differences between these claims and the other claims discussed previously.

First, the preambles of claims 25, 30, 32, 33, and 36 recite a “device,” unlike the previously-addressed method claims. These device claims are no different, however, from the earlier method claims because there is no substantive difference in function or implementation between the claims. Reciting a “device” in the preamble, without also reciting novel and nonobvious features of that device elsewhere in the claims, does not impose “a meaningful limitation beyond generally linking the use of the method to a particular technological environment, that is, implementation via computers.” *Alice* at 2360 (internal quotation marks omitted). Indeed, to treat these device claims any differently from the earlier method claims would improperly base patent-eligibility “on the draftsman’s art.” *Id.*; see also *Accenture*, 728 at 1342 (system and method claims rise and fall together where “[t]he system claims are simply the method claims implemented on a system for performing the method”). The preamble of claim 38 is slightly different, but no better in that it *explicitly* calls for “a general purpose computer system.” Indeed, to the extent there were any doubt as to whether the claims of the ’409 patent were directed to *generic* computing technology, the preamble of claim 38 resolves it.

Aside from the preambles, the claims also recite several elements in means-plus-function form. None of these elements is sufficient to transform the claims so as to render them patent eligible. Indeed, the Court has construed these limitations and found that the “corresponding

structure” for each of them is basic, generic, and/or non-specific computer technology. *See* D.I. 82 at 7. In particular, the Court found that the corresponding structure for (a) the “means for storing” is “computer storage,” (b) the “means for displaying” is “a display monitor,” (c) the “means for outputting” is “I/O controller and associated display monitor or printer,” and (d) the “means for generating” is “one or more devices inputting signals into the I/O controller and the I/O controller.” *Id.* None of these structures is new; they are all generic computer technology the patentee did not invent. Accordingly, they cannot transform the nature of the claim into one that is patent eligible.

Indeed, in *Alice* the Court was confronted with similar system claims and rejected them:

As to its system claims, petitioner emphasizes that those claims recite “specific hardware” configured to perform “specific computerized functions.” But what petitioner characterizes as specific hardware—a “data processing system” with a “communications controller” and “data storage unit,” for example, is purely functional and generic. Nearly every computer will include a “communications controller” and “data storage unit” capable of performing the basic calculation, storage, and transmission functions required by the method claims.

Alice at 2360 (emphasis added). The exact same thing is true here: computer storage, a display, an I/O controller, and (generic and unspecified) “devices inputting signals into the I/O controller,” are all basic conventional and generic components which “nearly every computer will include.” Thus they cannot transform these claims so as to render them patent eligible. *See Alice* at 2360 (rejecting system claims while noting that “[t]he method claims recite the abstract idea implemented on a generic computer; the system claims recite a handful of generic computer components configured to implement the same idea”); *see also Accenture*, 728 F.3d at 1344 (rejecting claims including a client, server, software engines and the transmission of signals and responses).

G. The '084 Patent Is Patent Ineligible Under § 101 and Invalid as a Result

The claims of the '084 patent are directed at the abstract idea of detecting anomalies in multiple data streams and telling people when they are found. Claim 1, for example, recites:

1. A method of alerting at least one device in a networked computer system comprising a plurality of devices to an anomaly, at least one of the plurality of devices having a firewall, comprising:
 - [a] detecting an anomaly in the networked computer system using network-based intrusion detection techniques comprising analyzing data entering into a plurality of hosts, servers, and computer sites in the networked computer system;
 - [b] determining which of the plurality of devices are anticipated to be affected by the anomaly by using pattern correlations across the plurality of hosts, servers, and computer sites; and
 - [c] alerting the devices that are anticipated to be affected by the anomaly.

None of these steps, taken individually or together, are directed to anything more than abstract ideas (*i.e.*, detecting an anomaly using multiple data streams) coupled with entirely conventional computer technology (*i.e.*, generic networked computer systems using conventional intrusion detection techniques).

First, consider the preamble. The preamble calls for “a method of alerting at least one device in a networked computer system” that includes multiple devices, at least one of which has a firewall. As discussed at the outset, the fact that a claim is directed to a method to be performed inside a generic “networked computer system” does nothing to advance patent eligibility. Instead it merely limits the claim “to a particular technological environment.” *Alice* at 2358; *see also buySAFE, Inc. v. Google, Inc.*, 765 F.3d at 1355 (“[I]t . . . cannot be enough that the transactions being guaranteed are themselves online transactions. At best, that narrowing is an attempt to limit the use of the abstract . . . idea to a particular technological

environment, which has long been held insufficient to save a claim in this context.”) (internal quotation marks omitted); *Comcast IP Holdings I*, 2014 WL 3542055, at *5 (“[G]eneric references to a telephony network and an application are not sufficient to render the claim patentable.”)

The reference to a “firewall” also does not advance patent eligibility, both because a “firewall” is not a specific machine,¹⁰ and because firewalls were conventional at the time the application was filed.¹¹ Indeed, the firewall does not actually *do* anything. In particular, it does not perform any of the steps of the claimed method, look for intrusions, or issue alerts. Instead, it just sits there, associated with one of the devices in the network. The claim might just as well have called for one of the networked devices to have a printer, or a display, or anything else for that matter. Even if the firewall were a specific device (it isn’t) or wasn’t conventional (it is), its presence cannot create patent eligibility because it doesn’t *do* anything in the claimed method. If a claim could be rendered patent eligible by reciting an “association” with some unused device, patent eligibility would depend on the draftsman’s art—because “[a] competent draftsman could attach some form of post-solution activity to almost any mathematical formula.” *Flook*, 437 U.S. at 590. Thus, the presence of an unused firewall has no bearing on eligibility.

The preamble’s statement that the “method” is for “alerting the device” also does not tie the claim to anything beyond the generic use of computers, especially in light of the fact that the step of “alerting the device” includes “notifying . . . an administrator.” D.I. 82 at 5. The preamble requires nothing more than a method of alerting a *person* who is responsible for a non-

¹⁰ See ’084 patent at 1:38–41 (“Firewalls are routers which use a set of rules to determine whether a data message should be permitted to pass into or out of a network”) and 2:2–4 (“A router is a network element that directs a packet in accordance with address information contained in the packet.”).

¹¹ See ’084 patent at 1:66–67 (“An example of a conventional firewall arrangement is depicted in FIG. 1.”)

specific and generic set of networked computers, one of which has (but does not use) a conventional firewall. That is clearly not patent-eligible subject matter under *Alice*—it is simply a high level description of a *conventional technological environment* in which the claimed method is to be performed.

Next, consider step [a]. The first half of that step calls for “detecting an anomaly in the networked computer system using network-based intrusion detection techniques.” This adds nothing other than calling for the use of (unspecified) “network-based intrusion detection techniques.” The specification is explicit that those techniques are conventional. *See* Feldman Decl. Ex. P (’084 patent) at 3:54–4:50 (discussing anomaly detection, and expert systems as well as noting that “recent practical attempts at detecting misuse have relied on a signature or pattern-detection mechanism”). The law is clear, however that “[s]imply appending ***conventional steps, specified at a high level of generality***” is not “enough” to transform an abstract idea into a patent-eligible invention. *Alice* at 2357 (emphasis added). That is a perfect description of this step of the method, and the reason it does not help establish patent eligibility.

The second half of limitation [a] calls for using the (unspecified and conventional) intrusion detection techniques for “analyzing data entering into a plurality of hosts, servers, and computer sites in the networked computer system.” This is what the applicant regarded as the novel feature of the invention:

The present invention is directed to a system and method for broad-scope intrusion detection. The system analyzes traffic coming into multiple hosts or other customers’ computers or sites. This provides additional data for analysis as compared to systems that just analyze the traffic coming into one customer’s site (as a conventional intrusion detection system does).

’084 patent at 5:44–51. The *idea* of analyzing traffic coming into multiple hosts or sites is, however, an abstract idea. It is not a specific machine, device or invention, and isn’t even the

kind of specific algorithm at issue in *Benson*. Indeed, it is little more than a corollary of the general principle that, when analyzing data, you get better results if you have more data.

Third, consider step [b], which calls for “determining which of the plurality of devices are anticipated to be affected by the anomaly by using pattern correlations across the plurality of hosts, servers, and computer sites.” Again, this step calls for pure data manipulation; using unspecified “pattern correlations” to determine which devices “may be impacted.” D.I. 82 at 6. Limitations directed to pure data manipulation do not, however, establish patent eligibility. *See Digitech*, 758 F.3d at 1351 (“Without additional limitations, a process that employs mathematical algorithms to manipulate existing information to generate additional information is not patent eligible.”).

The final limitation [c], “alerting the devices that are anticipated to be affected by the anomaly” also cannot help establish patent eligibility. As noted in connection with the preamble, the Court has construed this to mean notifying an administrator. The idea of alerting a person to an event is a purely abstract idea that does not require any specific machine, device or technology. *See CyberSource*, 654 F.3d at 1375 (“[M]erely claiming a software implementation of a purely mental process that could otherwise be performed without the use of a computer does not satisfy the machine prong of the machine-or-transformation test.”)

Claim 1 of the '084 patent, then, is directed to abstract ideas (namely, detecting anomalies in multiple data streams and telling people when they are found) using *conventional* intrusion-detection techniques in a *conventional* networked computer environment. Under *Alice* such a claim is not patent eligible because it is directed to abstract ideas (in satisfaction of the first step), and calls for nothing beyond applying that idea in the context of a conventional and generic computer environment (thereby failing the second step).

Indeed, the claim is very similar to the claim found invalid in *Alice*. In *Alice*, the Court found that “the use of a computer to obtain data, adjust account balances, and issue automated instructions” were all “well-understood, routine, conventional activities previously known to the industry” and did not give rise to a patent-eligible claim. *Alice* at 2359 (internal quotation marks and citations omitted). Claim 1 of the ’084 patent is similar in that it calls for “the use of a computer to:” (1) “obtain data” from the network, (2) apply an unspecified but conventional algorithm (to detect anomalies vs. *Alice*’s adjusting of account balances), and (3) “issue” messages (“alerts” vs. *Alice*’s “automated instructions”) based on the results of the data analysis. Claim 1 is, therefore, invalid for the same reasons and in *precisely the same way* as the claim invalidated in *Alice*.

H. The Remaining Claims of the ’084 Patent Are Equally Ineligible Under § 101

As discussed above in connection with the ’409 patent, claims which are “substantively similar” all rise or fall together because patent eligibility is focused on the nature of the claims and cannot depend “on the draftsman’s art.” *Alice* at 2360. For this reason, despite the individual discussion of the other claims that follows, the Court need only determine that the remaining claims are substantively similar in order to hold them invalid.

Claims 2, 20 & 28

Claims 2, 20, and 28 call for determining which of the “devices have been affected by the anomaly” and alerting them. This does not add anything which could result in passing the second step of *Alice*. Instead, this simply calls for making a slightly different determination based on the data manipulation recited in Claim 1—namely, determining which devices *have been* affected, rather than determining which devices *may be* affected. But changing the analytical goal of the claimed data manipulation does not change the fact that the claim is

directed to data manipulation in a conventional computer environment such that it is invalid under § 101.

Claims 4, 12, 22 & 30

Claims 4 and 12 further specify that “the anomaly comprises one of an intrusion and an intrusion attempt.” Claims 22 and 30 are similar but also adds the idea that the anomaly may be “reconnaissance activity.” Again, this cannot change the analysis under *Alice*. In particular, the fact that these claims calls for analyzing an anomaly that results from a different kind of event does not change the fact that the claim is directed to the patent-eligible abstract act of *analyzing* data in the context of a conventional network environment.

Claims 5, 6, 13, 14, 23, 24, 31 & 32

Claims 5, 13, 23, and 31 add the idea that the step of detecting the anomaly includes “analyzing a plurality of data packets with respect to predetermined patterns.” This step is very similar to the (supposed) invention of the ’694 patent and is abstract for the same reason. The *idea* of looking at multiple data packets to detect a pattern is just that – an idea. It isn’t a specific computer, machine, device or program. Thus the added limitation of claim 5 does not help the combined claim pass the second step of *Alice*.

Claims 6, 14, 24, and 32 are just variations of claims 5, 13, 23, and 31, and further provide that “analyzing the data packets comprises analyzing data packets that have been received at at least two of the plurality of devices.” All this adds to the claim is the idea of looking at data received from multiple devices. This same concept was in the base claim, however, and specifying (as these claims do) that the information is in the form of packets (which is the form that *all* information travels in within a computer network) does not add anything to the eligibility analysis. These claims fail *Alice* and are invalid as a result.

Claim 7

Claim 7 adds the idea that the step of “detecting the anomaly comprises recognition of an intrusion” and also calls for “generating an automated response to the intrusion.” The first addition (recognition of the intrusion) is a purely abstract idea that could be performed by a person. An “automated response” could not be performed by a person (insofar as the concept of automation implies the absence of a person) but the claim does not specify what the response is, or what device generates (or performs) the response. Thus, this claim is directed to the abstract *concept* of creating an automated response based on a condition—not to a specific device, program, or implementation. It therefore fails the second step of *Alice* and is invalid.

Claim 9

Claim 9 is an independent claim that is virtually identical to claim 1 with only two minor linguistic differences. There is nothing about the claim that could alter the analysis relative to claim 1 and it therefore falls outside the scope of patent-eligible subject matter for the same reasons.

Claim 16

Claim 16 specifies that “alerting the device comprises generating and transmitting an electronic notification to one of the device and an administrator of the device.” This claim requires nothing more than, for example, sending an email to an administrator. That is totally conventional activity, and does nothing to change the nature of the base claim which it modifies. If an otherwise invalid base claim could be rendered patent eligible by reciting the step of sending an email after the data manipulation was complete, *Alice*’s § 101 analysis would be a dead letter. *See Alice* at 2360 (patent eligibility does not depend on the draftsman’s art). The

added limitation in claim 16 does not cause the claim to pass the second step of *Alice*. The claim is invalid.

Claim 17

Claim 17 further requires “controlling the device that is anticipated to be affected by the anomaly.” Devices, of course, can be controlled by people. Thus this claim requires nothing more than having a person “control” a device in an unspecified way (*e.g.*, by turning it off). To put it differently, this claim is directed to an abstract idea of exerting control over a device that may be affected by an intrusion—but does not call for a specific device, machine, implementation or program to exercise that control, or even specify the kind of control that will be exercised. It does not add anything that might satisfy the second step of *Alice*.

Claims 19 & 26

Claims 19 and 26 are system claims that calls for a “data collection and processing center comprising a computer with a firewall coupled to the computer network” to perform the method recited in claim 1. In *Alice*, the Supreme Court expressly found that system claims which were substantively similar to the method claims, but recited “a handful of generic computer components” did not impact the eligibility analysis:

Put another way, the system claims are no different from the method claims in substance. The method claims recite the abstract idea implemented on a generic computer; the system claims recite a handful of generic computer components configured to implement the same idea. This Court has long warned against interpreting § 101 in ways that make patent eligibility depend simply on the draftsman’s art.

Alice at 2360 (internal quotation marks omitted). The same thing is true here. The fact that claim 19 calls for a generic computer to perform the same steps analyzed in the method claims cannot lead to a different result.

Nor does the fact that claim 19 calls for the (otherwise unspecified and generic) devices in the network to either “sense data” or “be adjustable” make a difference. Sensing data and being adjustable are two of the most basic characteristics of a computer. Nothing about the fact that the devices must possess *one* of these basic characteristics makes them specific machines or otherwise *transforms* the nature of the claims in satisfaction of the second step in the *Alice* analysis. These claims, too, are invalid.

Claim 27

Claim 27 depends from claim 26 and simply adds one of the functions called for in claim 1 but omitted from claim 26, namely “determining which of a plurality of devices that are connected to the network are anticipated to be affected by the anomaly by using pattern correlations across the plurality of hosts, servers, and computer sites, and alerting the devices.” Because this function is substantively identical to the functions discussed in connection with claim 1, it does not change the analysis of claim 26, or transform the nature of that claim so as to satisfy the second step of *Alice*.

III. CONCLUSION

IV intentionally built its infringement case on patents which are directed to abstract ideas and are not limited to any particular hardware, software, system or implementation so that it could accuse many different products, technologies, banks, and vendors. Under the law of the land, that makes the patents invalid under 35 U.S.C. § 101. The Court should so hold.

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DURIE TANGRI LLP

/s/ Clement S. Roberts

By: _____

Clement S. Roberts
Michael A. Feldman
Robert S.J. Rogoyski
217 Leidesdorff Street
San Francisco, CA 94111
Telephone: (415) 362-6666
Facsimile: (415) 236-6300
croberts@durietangri.com
mfeldman@durietangri.com

DONTZIN NAGY & FLEISSIG LLP

Matthrew S. Dontzin
Tibor L. Nagy, Jr.
Rachel K. Clapp
980 Madison Avenue
New York, NY 10075
Telephone: (212) 717-2900
Facsimile: (212) 717-8088
mdontzin@dnflp.com
tibor@dnflp.com
rclapp@dnflp.com

KIRKLAND & ELLIS LLP

Kenneth R. Adamo
601 Lexington Avenue
New York, NY 10022-4611
Telephone: (212) 446-4839
Facsimile: (212) 446-4900
kenneth.adamo@kirkland.com

Brent P. Ray
300 N. LaSalle Street
Chicago, IL 60654
Telephone: (312) 862-2200
Facsimile: (312) 862-2200
brent.ray@kirkland.com

Attorneys for Defendants / Counterclaim-
Plaintiffs

CERTIFICATE OF SERVICE

I, Clement S. Roberts, hereby certify that on October 17, 2014 the within document was filed with the Clerk of the Court using CM/ECF which will send notification of such filing(s) to the following; that the document was served on the following counsel as indicated; and that the document is available for viewing and downloading from CM/ECF.

DUNNEGAN & SCILEPPI LLC
William Dunnegan
Richard Weiss
350 Fifth Avenue
New York, New York 10118
(212) 332-8300
wd@dunnegan.com
rw@dunnegan.com

Attorneys for Plaintiff and Counter-Defendant Intellectual Ventures II L.L.C.

FEINBERG DAY ALBERTI & THOMPSON LLP
Ian Feinberg
Elizabeth Day
Clayton W. Thompson , II
David Alberti
Peter Mikhail
Sal Lim
Marc C. Belloli
Vinay Kumar Malik
Yakov Zolotorev
1600 El Camino Real, Suite 280
Menlo Park, CA 94025
(650) 618-4360
ifeinberg@feinday.com
eday@feinday.com
cthompson@feinday.com
dalberti@feinday.com
pmikhail@feinday.com
slim@feinday.com
mbelloli@feinday.com
vmalik@feinday.com
yzolotorev@feinday.com

Attorneys for Plaintiff and Counter-Defendant Intellectual Ventures II L.L.C.

LIEFF CABRASER HEIMANN & BERNSTEIN, LLP

David Taylor Rudolph

Eric B. Fastiff

Jerome Philippe Mayer-Cantu

Kevin Reid Budner

Melissa Gardner

Patricia Ann Dyck

Phong-Chau Gia Nguyen

275 Battery Street, 30th Floor

San Francisco, CA 94111-3339

(415)-956-1000

Fax: (415)-956-1008

drudolph@lchb.com

efastiff@lchb.com

jmayercantu@lchb.com

kbudner@lchb.com

mgardner@lchb.com

pdycck@lchb.com

pgnguyen@lchb.com

Attorneys for Plaintiff and Counter-Defendant Intellectual Ventures II L.L.C.

/s/ Clement S. Roberts

Clement S. Roberts